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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,599	08/16/2000	Alex S. Toback	TOB/102/US	2976

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ALIX YALE & RISTAS LLP  
750 MAIN STREET  
SUITE 1400  
HARTFORD, CT 06103

EXAMINER

OMGBA, ESSAMA

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 12/04/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/639,599

Applicant(s)

Alex S. Toback

Examiner

Essama Omgba

Art Unit

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.

- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on Sep 10, 2002

2a) ☒ This action is **FINAL**.

2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) 1-24 is/are pending in the applica

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from considera

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-24 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirem

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some\* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Orowan (US Patent 3,655,424).

With regards to claims 1-3, 8-10, 16, 17, 19, 20, 22 and 23, Applicant, at page 1 of the specification discloses a connection system for light gauge steel construction and an assembly wherein numerous self-drilling screws or other fasteners are used to provide the connection between a panel and a support structure. AAPA does not disclose applying an adhesive curable at room temperature to at least the panel or the support structure and placing them against each other. However it is known to use an adhesive material between plates of a lap joint used in a connection with rivets or other fasteners as attested by Orowan, see column 1, lines 8-30 and figure 1. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used an adhesive material in the connection of AAPA, in light of the teachings of Orowan, in order to relieve the load on the fasteners to a relatively small extent and

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give protection against fretting between the parts joined. Applicant should note that the connection of Orowan is significantly enhanced in load bearing capacity, see column 1, lines 24-29 in particular.

For claims 4-7, 11-15, 18, 21 and 24, Applicant should note that it is within the general knowledge of one of ordinary skill in the art to select the appropriate adhesive for the connection and that fast setting adhesive are well known to those of ordinary skill in the art.

3. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA/Orowan as applied to claim 1 above, and further in view of Good et al. (US Patent 4,426,425).

AAPA/Orowan discloses a connection system as shown above except for the adhesive being a two-part epoxy system comprising a resin and a hardener mixed in equal portions by weight or volume wherein the adhesive fully cures within approximately 72 hours. However Good et al teaches such adhesive, see column 2, lines 26-34 and column 3, lines 8-20. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a two-part epoxy system as the adhesive of AAPA/Orowan, in light of the teachings of Good et al., in order to achieve a bond with superior shear and strength.

4. Claims 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Orowan and Good et al..

With regards to claims 8-10, Applicant, at page 1 of the specification discloses a connection system for light gauge steel construction and an assembly wherein numerous self-drilling screws

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or other fasteners are used to provide the connection between a panel and a support structure.

AAPA does not disclose applying an a bead of epoxy curable at room temperature to at least the panel or the support structure and placing them against each other. However it is known to use an adhesive material between plates of a lap joint used in a connection with rivets or other fasteners as attested by Orowan, see column 1, lines 8-30 and figure 1. Furthermore Good et al. teaches using an epoxy curable at room temperature to adhere metal members, see column 2, lines 26-34. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a bead of epoxy that cures at room temperature as the adhesive material with the connection of AAPA, in light of the teachings of Orowan and Good et al., in order to relieve the load on the fasteners to a relatively small extent and achieve a bond with superior shear and strength. Applicant should note that the connection of Orowan is significantly enhanced in load bearing capacity, see column 1, lines 24-29 in particular.

For claims 12-15, see column 2, lines 25-34 and column 3, lines 8-20 of Good et al.

5. Claims 18, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA/Orowan as applied to claims 16, 19 and 22 above, and further in view of Good et al. AAPA/Orowan discloses a connection system as shown above except for the adhesive being selected from the group consisting of epoxy, methacrylate and urethane. However Good et al. teaches such adhesive, see column 2, lines 25-29. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a two-part epoxy system

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as the adhesive of AAPA/Orowan, in light of the teachings of Good et al., in order to achieve a bond with superior shear and strength.

***Response to Arguments***

6. Applicant's arguments filed on 9/10/2002 have been fully considered but they are not persuasive.

In response to Applicant's argument that Applicant's invention produces a system and assembly wherein the essence of the load bearing connection is provided by the adhesive system and not the mechanical fasteners, the examiner cannot see any structural difference that would indicate that the system and assembly of the prior art does not have the load bearing capabilities of Applicant's invention. The prior art system and assembly is structurally equivalent to Applicant's claimed system and assembly. The recitation of the intended result of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art.

Regarding claims 1-18, Applicant should also note that even though product-by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of the product does not depend on its method of production. If the product in the product-by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process.

*In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

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In view of the above remarks, the examiner maintains that a *prima facie* case of obviousness has been established in the instant application.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***References***

8. The prior art references listed on the enclosed PTO-892, but not used in a rejection of the claims, are pertinent to Applicant's disclosure.

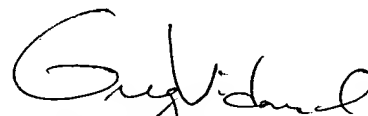
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**Contact Information**

9. Official documents related to the instant application may be submitted to the Technology Center 3700 mail center by facsimile at (703) 305-3579/3580. Should Applicant desire to submit a DRAFT response to the Examiner by facsimile transmission, then Applicant should contact the Examiner at the number below for instructions concerning the transmission of DRAFT documents. Applicant is reminded to clearly mark any facsimile transmission as "DRAFT" if it is not to be considered as an official response.

10. Any inquiry concerning this communication should be directed to Examiner Essama Omgba at telephone number (703) 305-2915.

eo   
November 30, 2002

  
GREGORY M. VIDOVICH  
PRIMARY EXAMINER